Nº 17,967 A.D. 1900

Date of Application, 13th Dec., 1900
(Under Sect. 2 of the Patents, &c., Act, 1888.)
Complete Specification Left, 31st Aug., 1901—Accepted, 13th Feb., 1902

PROVISIONAL SPECIFICATION.

Improved Disinfecting and Fumigating Appliance.

Edward Sanger, New York City, No. 631. East 136 Street, United States of America, do hereby declare the nature of this invention to be as follows:—

The apparatus is composed of a thick glass vessel, receptacle with a covering of metal to protect it from without, the glass vessel is sufficiently thick enough to withstand the pressure of the gas generated by the ingredients, it is set on a solid rubber plate "*m*" this plate is in turn held in place by a small flange cast on to inside covering "*r*" the glass receptacle is protected by rubber band cushion "*i*" which prevents any severe jars which the apparatus might receive from without from breaking glass receptacle, this also held in place by small flange cast on to outside covering, the metal enclosure to part "*b*" is circular and has two lines of perforation "*n*" these small perforation are about one inch on centre so as allow of any escape of gas that may find its way in this space between enclosure and glass receptacle.

Outside enclosure is to be of aluminum metal, on account of its lightness and non corrosive quality.

Part "*b*" is attached to part "*r*" when part "*o*" is placed in position "*o*" is in two semi circular parts,

So as allow these parts to fit tight against the neck of the vessel, these parts held in position by hand, while part "D & C" are put in position, these parts set on rubber cushion "*f*" which prevents any damage to the top of the apparatus, and cushion "*g*" is placed to prevent the part "*o*" from wearing out.

The special feature of the apparatus is the method by which the gas is allowed to escape, and is then shut off, this is done by means of a small lock and faucet, which control a tube, which is attached by web and ferrule to part "*r*" at point where tube spans opening of the vessel, there is a small circular opening so that when gas is allowed to escape, this small circular opening is concentric with opening in top apparatus.

Another special feature is the cap, "*a*" which allows the gas to be transmitted gradually, instead in a perpendicular spout, as it would be were the cap left off cap "*a*" has perforation which tend to take the pressure away from any sudden escape of the gas, against same, The ingredients of this invention are black oxide of manganese, and nitric acid and muriatic acid, produces a durable power of healthy gas, and will last six months or longer, using it daily.

EDWARD SANGER,
New York No. 631. East. 136. Street U.S.A.

COMPLETE SPECIFICATION.

Improved Disinfecting and Fumigating Appliance.

Edward Sanger, New York City, United States of America, No. 631. East.

[*Price 8d.*]

136 Street, N.Y. do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

Consists of a vessel of thick glass containing about six decilitres (nearly 1—1/4 wine pint) or larger vessels as required.

To produce the disinfecting gas, 40 grammes, (1—1/4 oz) of black oxide of manganese, is put into the vessel; afterwards one decilitre (1—6 of the capacity) of pure nitric acid, of 1—40 specific gravity; and an equal volume of muriatic acid of 1.13 specific gravity is poured over it.

Two third of the vessel must always be kept empty to contain the gas, using daily this gas will last six months or longer.

Novelty of this invention, consists of a durable powerful gas, produced from black oxide of manganese, and nitric acid, and muriatic acid, provided with suitable apparatus to contain the gas, under control protected with a cast iron cover, and requires no science to work it. World's permanent and portable gas apparatus placed in coal mines. Permanent will destroy noxious vapers, and fire damps.

The description of invention consists, black oxide of manganese, and nitric acid, and muriatic acid, provided with a strong glass vessel, to open or close, will produce healthy expansion perceivable through a whole appartment in a few minutes, without any danger whatever, and will continue for six months or longer, using it daily.

It is of great utility and sure, effective to destroy contagious diseases, and noxious vapours, and purifying air.

In hospitals, cellars, churches, schools, mines, ships, halls, prisons, barracks, cemetaries-vaults, theatre workingshop, *etc*, where the number person, or any other cause, renders such measure necessary, can be accomplished effective, with my invention, through the civilized world,

The apparatus is composed of a thick glass receptacle with a jacket or covering of metal to protect it from without, and is of a sufficient strength to withstand the pressure of the gas generated by the ingredients.

The glass receptacle is set on a solid rubber plate "*m*" this plate is held in place by a small casting "*w*" cast on the inside of the main body of the cast iron jacket or covering "*v*". The glass receptacle is further protected in the same manner but on sides by rubber bands "*i*" which are supported by flanges "*x*" cast on the jacket or covering.

The cast iron jacket is semicircular in all of its parts and has two lines of perforations "*n*" and "*i*" below part *i* in part "*v*". These perforations are about on inch on center and necessary to allow the escape of any gas which might find itself in space enclosed by parts "*b*" and "*r*" and glass receptacle. Part "*r*" is attached to part "*i*" when the glass receptacle "J" is set on rubber cushion "*m*". When "*r*" is attached to part "*i*", "*o*" is placed in position. "*o*" is in two semicircular parts so as to allow these parts to fit tight against the neck of the vessel, these parts are held in position by hand while upper part "*d*" is attached to "*o*". Rubber cushion "*f*" and "*g*" are provided so as to avoid direct friction of the two parts "*d*" and "*o*".

The glass receptacle "J" ends at rubber cushion "*f*". The parts "*d*", "*c*" and "*h*" in Provisional Specification have been consolidated into one casting "*d*" and stop cock "*e*" has also been simplified.

The draw cock "*e*" is inserted into part "*d*" as shown on main transverse section and held tight against part "*d*" by cap "*r*" screwed on to part "*e*". When it is desired to transmit any gas from receptacle to adjoining atmosphere the section of stop cock will show as on small transverse section at left of main drawing when it is desired to stop the flow of gas. The stop cock will show as on main transverse drawing.

In order that the stop cock may not be turned indefinitely a small flange "*q*" semi-circular is cast on part "*d*", as shown on small drawing to right of main drawing and another small flange "*s*" cast on to stop cock "*e*" when stop cock is turned to right so that flange "*s*" reaches point "*u*" the stop cock is open, and when it is turned back again to point "*y*" the stop cock is closed. The parts "*e*". "*d*", "*o*" and "*a*" are made of steel. All other parts are made of cast iron.

The part "*a*" is attached to part "*d*" when stop cock is in place.

The special feature of the part "*a*" is that it prevents the flow of the gas upwards, but transmits the gas uniformly through the perforations "P" and "K", & "*b*"

Having now described clearly all of my invention, and the apparatus and drawing,

Ingredients of durable power effective to destroy contagious, diseases, and noxious vapours as indicated in the note (*c*) on the stamped form C, is what I. claim

Dated this 9th day of October, 1900.

EDWARD SANGER,
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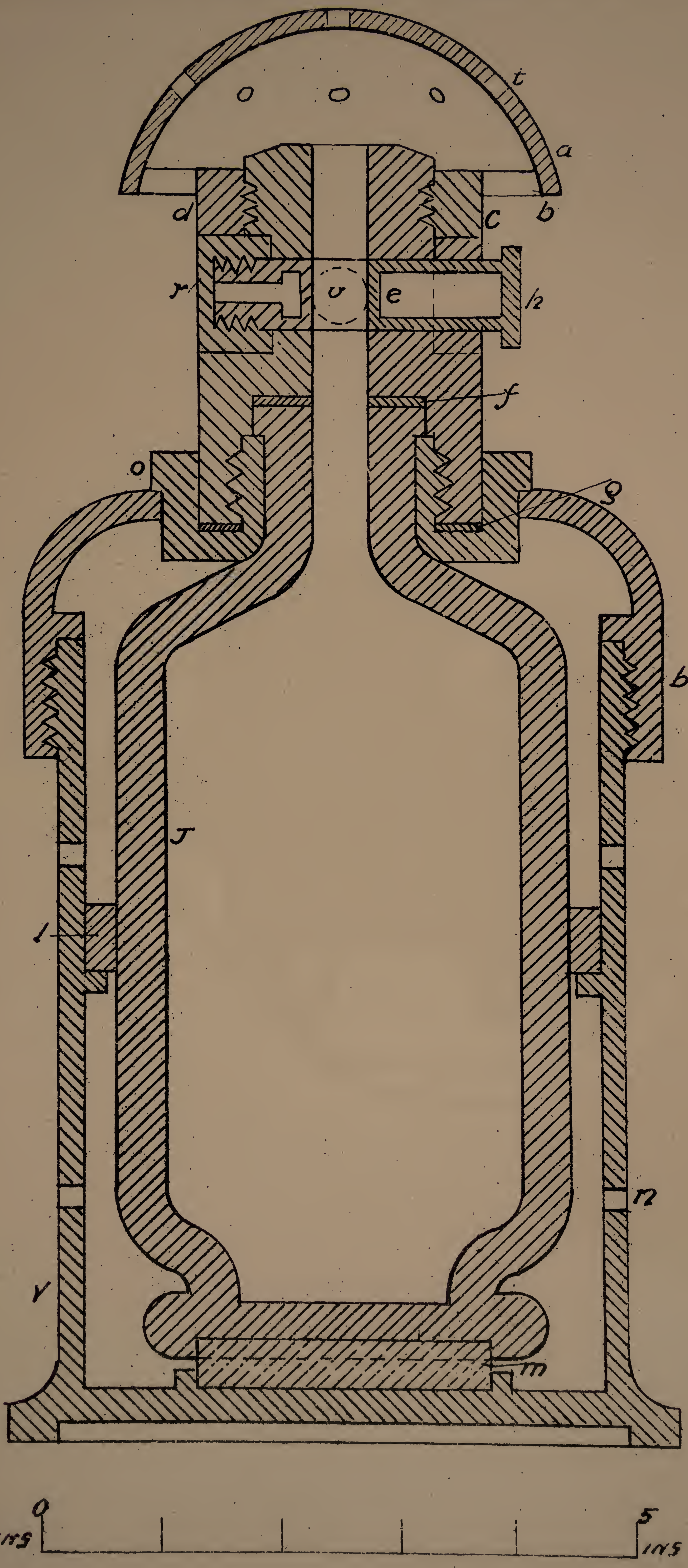
SANGER'S PROVISIONAL SPECIFICATION (1 SHEET)



[This Drawing is a reproduction of the Original on a reduced scale.]

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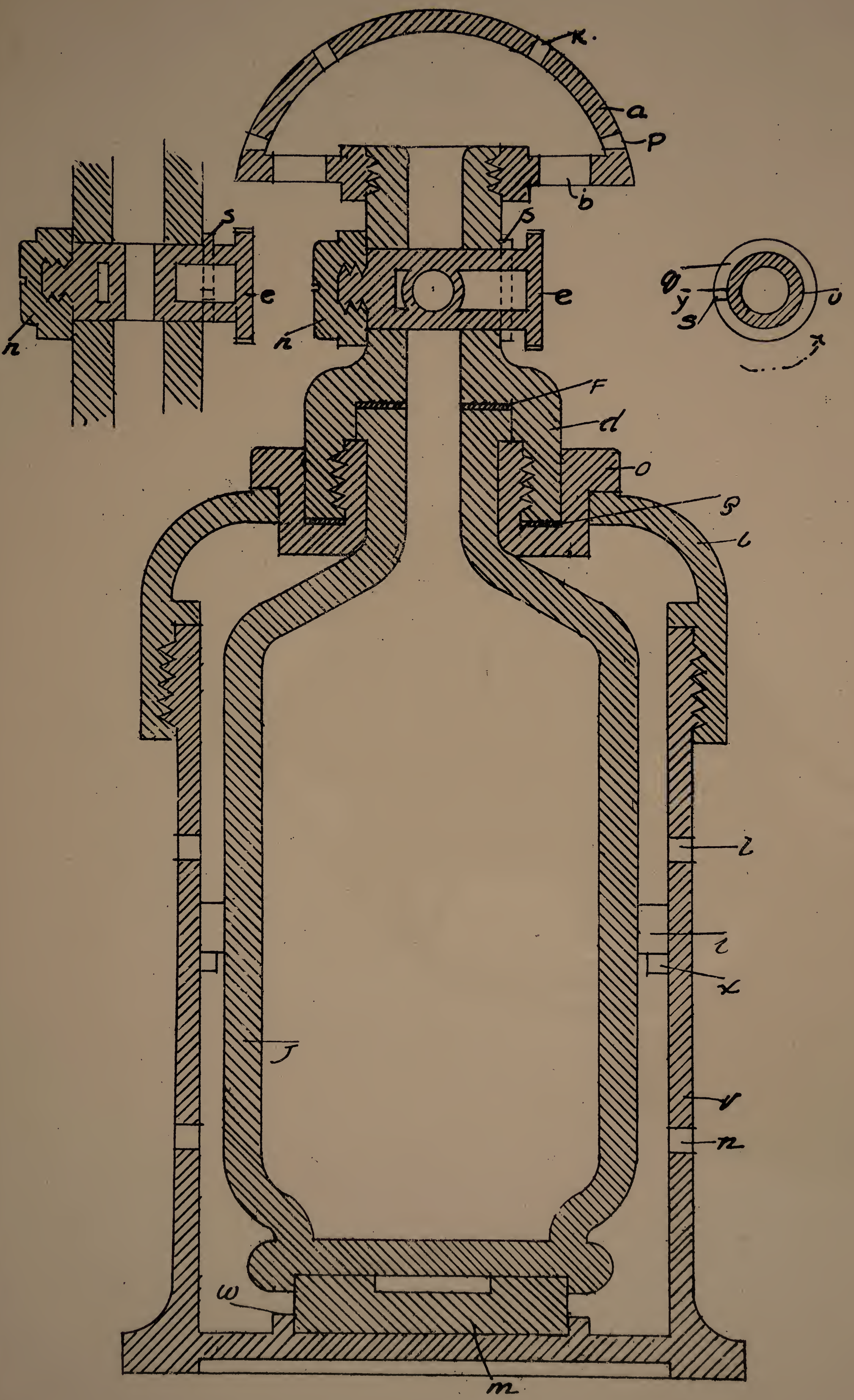
SANGER'S Complete Specification.

(1 SHEET)



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